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**United States Patent [19]**

Iguchi et al.

**[11] Patent Number: 6,016,028**  
**[45] Date of Patent: Jan. 18, 2000****[54] GLASS BULB FOR COLOR PICTURE TUBE AND THE SAME TUBE****[75] Inventors:** Yukinobu Iguchi; Ichiro Utsumi; Koji Saita, all of Kanagawa, Japan**[73] Assignee:** Sony Corporation, Japan**[21] Appl. No.:** 08/914,118**[22] Filed:** Aug. 19, 1997**[30] Foreign Application Priority Data**

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H01J 31/00; H01J 61/30**[52] U.S. Cl.** ..... 313/402; 313/461; 313/477 R;  
313/479; 313/408; 220/2.1 A**[58] Field of Search** ..... 313/402, 403,  
313/404, 407, 408, 461, 473-74, 477 R,  
478-79; 220/2.1 A, 2.3 A, 2.1 R, 2.3 R**[56] References Cited****U.S. PATENT DOCUMENTS**

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Fishman & Grauer***[57] ABSTRACT**

A color picture tube is provided with a glass bulb in which the external surface of the effective display area of the face plate is formed substantially flat and a color selection mask, having the curvature projected toward the face plate, provided opposed to the internal surface of the face plate within the glass bulb. Therefore, the external surface is flat, the mechanical shock resistance characteristic is high, a tension can surely be applied to the color selection mask and moreover vibration of the color selection mask can be prevented even if external vibration is applied thereto.

**9 Claims, 4 Drawing Sheets**